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*AF#*

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of

Mark A. Kappel

Serial No: 10/064,145

Group Art Unit: 2839

Filed: 06/14/2002

Examiner: Duverne, Jean F.

For: ELECTROSTATIC DISCHARGE PROTECTIVE  
BOOT FOR A CONNECTOR

Attorney Docket No: 126062 (GEMS 0162 PUS)

**CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. § 1.8(a))**

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Kevin G. Mierzwa

**BRIEF ON APPEAL**

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
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Sir:

The following Appeal Brief is submitted pursuant to the Notice of Appeal filed on  
November 10, 2004, for the above-identified application.

01/11/2005 MAHME1 00000027 10064145

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**I. Real Party in Interest**

The real party in interest in this matter is the General Electric Company.

**II. Related Appeals and Interferences**

There are no other known appeals or interferences which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

**III. Status of the Claims**

Claims 1-11, 13-17, 19 and 20 stand rejected in the Final Office Action. A copy of the claims on appeal is attached as an Appendix.

**IV. Status of Amendments Filed After Final**

There have been no amendments filed subsequent to the final rejection.

**V. Summary of the Invention**

The present invention is illustrated in Figure 8 of the present application. More specifically, the bottom portion of Figure 8. Claim 1 is directed to a connector cap assembly (110) for mechanically and electrically coupling to a connector (22) having connector contacts. A boot housing (112) is formed of electrical charge dissipative material. The housing (112) is sized to receive the connector (22) therein. The boot housing (112) comprises a floor portion (118) contacting the connector contacts (120). The assembly further includes a retainer (130) positioned on the housing for retaining a ground wire (132) in contact with the housing (112).

Claim 2 recites that the charge dissipative material comprises rubber.

Claim 3 recites that the floor portion (118) comprises a plurality of floor contacts (120) electrically coupled to said connector contacts.

Claim 4 recites that the floor contacts (120) contact more than one connector contacts.

Claim 5 depends from Claim 3 and recites that the floor contacts (120) contact four connector contacts.

Claim 6 depends from Claim 3 and recites that the floor contacts are pyramidal in shape.

Claim 7 depends from Claim 6 and recites that the pyramidal shape has a plurality of sides, each side contacting one of said connector contacts.

Claim 8 depends from Claim 7 and recites that the plurality of sides comprises four.

Claim 9 recites that the floor portion (118) is compliant.

Claim 10 recites that the retainer (130) comprises a plurality of protrusions (134) and a tab (136), whereby the ground wire is retained between said plurality of protrusions and the tab.

Claim 11 recites that the boot housing (112) has retainer arms (114) extending therefrom, the retainer arms sized to receive the connector therein.

Claim 12 recites that the retainer arms (114) comprise snap openings (116) sized to receive a connector snap. This claim stands objected to (and has not been appealed). Appellant includes this description for clarity.

Claim 13 recites that the boot housing (112) comprises an alignment guide (122) therein.

Claim 14 is a second independent claim that recites an assembly. The assembly includes a connector (56) having connector (60) contacts, a boot housing (112) coupled to the connector. The boot housing (112) is formed of electrical charge dissipative material. The boot housing (112) comprises a floor portion having a plurality of floor contacts (118) contacting the connector contacts (60). The assembly further includes a retainer (130) positioned on the housing for retaining a ground wire (132) in contact with the housing (112).

Claim 15 recites that the floor contacts (118) contact more than one connector contacts.

Claim 16 recites that the floor contacts (118) contact four connector contacts.

Claim 17 recites that the boot housing has retainer arms (114) extending therefrom, said retainer arms sized to receive a guide channel on said connector.

Claim 18 depends from Claim 17 and recites that the retainer arms comprise snap openings (116) sized to receive a snap (56) disposed on the connector (56). Claim 18 depends from claim 17. Claim 18 stands objected to and has only been set forth here for completeness.

Claim 19 recites that the boot housing comprises an alignment guide (122) therein.

Claim 20 depends from Claim 19 and recites that the connector is coupled to a socket carrier (50) having an alignment slot (78) sized to receive said alignment guide (122).

## **VI. Grounds of Rejection to be Reviewed on Appeal**

The following issues are presented in this appeal:

Whether claims 1, 3-4, 6-11, 13-15, 17, 19-20 are anticipated under 35 U.S.C. §102(b) by *Gordbegli* (4,460,994).

Whether claims 1, 3-4, 6-11, 13-15, 17, 19-20 are anticipated under 35 U.S.C. §103(a) by *Gordbegli* (4,460,994).

Whether claim 2 is obvious under 35 U.S.C. §103(a) as being unpatentable over *Gordbegli* in view of *Feng* (6,046,908).

## **VII. Argument**

### **The Rejection of Claims 1, 3-4, 6-11, 13-15, 17, 19-20**

#### **Claims 1 and 14**

The *Gordbegli* reference fails to teach or suggest many of the features in the present claims. The *Gordbegli* reference is directed to a heat sensitive pool light. The *Gordbegli* reference does not refer to electrical connectors as recited in the present application. In the preamble of Claim 1, a connector cap assembly is recited for mechanically and electrically coupling to a connector having connector contacts. The Examiner has not pointed to any portion of the *Gordbegli* reference that has a connector and connector contacts. However, because those limitations are recited in the preamble, they may not be considered to be limiting. The first element of Claim 1 is a boot housing formed of electrically charged dissipative material. The metal housing 18 is described in the reference as a metal housing. Arguably, this is a charge dissipative material. However, such material is merely used to dissipate heat as described in Col. 2, lines 2 and 3 of the reference. Because this device is used in a pool, it is unlikely to be charge dissipative since you would not want charge (and therefore current) so close to bathers. The housing as recited in claim 1 is sized to receive a connector therein. No teaching or suggestion is found in *Gordbegli* for a connector or that the housing is sized to receive a connector therein.

Further, Claim 1 also recites that the boot housing comprises a floor portion contacting said connector contacts. The Examiner merely mentions that a floor portion exists without pointing to any specific recitation or figure. Appellants respectfully submit that this portion of the claim is also not illustrated in the *Gordbegli* reference.

Further, although a ground wire 22 is illustrated in the *Gordbegli* reference, a retainer positioned on the housing for retaining a ground wire in contact with the housing is not taught or suggested. It appears that the ground wire in Fig. 3 is merely coupled directly to a portion of the

circuit. Appellants therefore respectfully request the Board to reverse the Examiner's position with respect to Claim 1 since each and every one of the elements is not found in the *Gordbegli* reference.

Likewise, independent Claim 14 has similar limitations and recites the connector in the body of the claim. As mentioned above, a connector having connector contacts is not taught or suggested in the *Gordbegli* reference. Appellants therefore respectfully request the Board to reverse the Examiner's rejection of Claim 14.

Likewise, Claims 3-4, 6-11, 13, 15, 17, and 19-20 are dependent upon Claim 1 and are also believed to be allowable for the same reasons set forth above.

### **The Rejection of Claims 5 and 16**

#### **Claims 5 and 16**

Claims 5 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Gordbegli*. Claims 5 and 16 are dependent upon Claims 1 and 14, respectively. Appellants therefore respectfully request the Board to reverse the Examiner's rejection of Claims 5 and 16 for the same reasons set forth above.

### **The Rejection of Claim 2**

#### **Claim 2**

Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Gordbegli* in view of *Feng* (6,046,908). Appellants respectfully traverse. Claim 2 is dependent upon Claim 1. The elements missing from the *Gordbegli* reference are not taught or suggested in the *Feng* reference. Appellants therefore respectfully request the Board to reconsider the Examiner's rejection of Claim 2.

### **VIII. Appendix**


A copy of each of the claims involved in this appeal, namely Claims 1-11, 13-17, and 19-20 are attached hereto as Appendix A. Claims 12 and 18, which are not under appeal, are also set forth for completeness.

**IX. Conclusion**

For the foregoing reasons, Appellants respectfully request that the Board direct the Examiner in charge of this examination to withdraw the rejections.

A check in the amount of \$500.00 for filing the brief in support of an appeal is enclosed herewith. Please credit any overpayment or charge any additional fees required in the filing of this appeal to deposit account 50-0476.

Respectfully submitted,

  
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Date: 1-5-05

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## **APPENDIX A**

1. A connector cap assembly for mechanically and electrically coupling to a connector having connector contacts comprising:

a boot housing formed of electrical charge dissipative material, said housing sized to receive said connector therein, said boot housing comprising a floor portion contacting said connector contacts; and

a retainer positioned on said housing for retaining a ground wire in contact with the housing.

2. A connector cap assembly as recited in claim 1 wherein said charged dissipative material comprises rubber.

3. A connector cap assembly as recited in claim 1 wherein said floor portion comprises a plurality of floor contacts electrically coupled to said connector contacts.

4. A connector cap assembly as recited in claim 3 wherein said floor contacts contact more than one connector contacts.

5. A connector cap assembly as recited in claim 3 wherein said floor contacts contact four connector contacts.

6. A connector cap assembly as recited in claim 3 wherein said floor contacts are pyramidal in shape.

7. A connector cap assembly as recited in claim 6 wherein said pyramidal shape has a plurality of sides, each side contacting one of said connector contacts.

8. A connector cap assembly as recited in claim 7 wherein said plurality of sides comprises four.

9. A connector cap assembly as recited in claim 1 wherein said floor portion is compliant.

10. A connector cap assembly as recited in claim 1 wherein said retainer comprises a plurality of protrusions and a tab, whereby said ground wire is retained between said plurality of protrusions and said tab.

11. A connector cap assembly as recited in claim 1 wherein said boot housing has retainer arms extending therefrom, said retainer arms sized to receive said connector therein.

12. A connector cap assembly as recited in claim 11 wherein said retainer arms comprise snap openings sized to receive a connector snap.

13. A connector cap assembly as recited in claim 1 wherein said boot housing comprises alignment guide therein.

14. An assembly comprising:  
a connector having connector contacts;  
a boot housing coupled to said connector, said boot housing formed of electrical charge dissipative material, said boot housing comprising a floor portion having a plurality of floor contacts contacting said connector contacts;  
a retainer positioned on said housing for retaining a ground wire in contact with the housing.

15. An assembly as recited in claim 14 wherein said floor contacts contact more than one connector contacts.

16. An assembly as recited in claim 14 wherein said floor contacts contact four connector contacts.

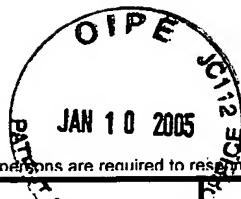
17. An assembly as recited in claim 14 wherein said boot housing has retainer arms extending therefrom, said retainer arms sized to receive a guide channel on said connector.

18. An assembly as recited in claim 17 wherein said retainer arms comprise snap openings sized to receive a snap disposed on said connector.

19. An assembly as recited in claim 14 wherein said boot housing comprises alignment guide therein.

20. An assembly as recited in claim 19 wherein said connector is coupled to a socket carrier having an alignment slot sized to receive said alignment guide.





PTO/SB/17 (12-04)

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Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4141).

# FEE TRANSMITTAL

## For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27TOTAL AMOUNT OF PAYMENT (\$)  
500.00**Complete if Known**

Application Number	10/064,145
Filing Date	06/14/2002
First Named Inventor	Mark A. Kappel
Examiner Name	Duverne, Jean F.
Art Unit	2839
Attorney Docket No.	126062

**METHOD OF PAYMENT** (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☐ Deposit Account Deposit Account Number: 50-0476 Deposit Account Name: John A. Artz, PC

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**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
- 20 or HP =	x	=				
HP = highest number of total claims paid for, if greater than 20						
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)			
- 3 or HP =	x	=				
HP = highest number of independent claims paid for, if greater than 3						

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
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**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other: Filing a brief in support of an appeal

Fees Paid (\$)

500.00

**SUBMITTED BY**

Signature		Registration No. 38,049 (Attorney/Agent)	Telephone 248-223-9500
Name (Print/Type)	Kevin G. Mierzwa		Date 1-5-05

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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